

10/587606

SEQUENCE LISTING

AP20 Rec'd PCT/PTO 27 JUL 2006

<110> Fine, Robert L  
Brandt-Rauf, Paul  
Mao, Yueha

<120> C-Terminal p53 Palindromic Peptide That Induces Apoptosis of  
Cells with Aberrant p53 and Uses Thereof

<130> 68074-A-PCT-US/JPW/JW

<150> PCT/US2005/002543  
<151> 2005-01-27

<150> US 60/540,864  
<151> 2004-01-30

<160> 9

<170> PatentIn version 3.3

<210> 1  
<211> 41  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Polypeptide based on human p53

<400> 1

Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser Ser His  
1 5 10 15

Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Met  
20 25 30

Phe Lys Thr Glu Gly Pro Asp Ser Asp  
35 40

<210> 2  
<211> 41  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Polypeptide based on human p53

<400> 2

Asp Ser Asp Pro Gly Glu Thr Lys Phe Met Leu Lys Lys His Arg Ser  
1 5 10 15

Thr Ser Gln Gly Lys Lys Ser Lys Leu His Ser Ser His Ala Arg Ser  
20 25 30

Gly Gly Pro Glu Lys Gly Ala Gln Ala  
35 40

<210> 3  
<211> 83  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Palindromic polypeptide based on human p53

<220>  
<221> MISC\_FEATURE  
<222> (42)..(42)  
<223> Xaa = Gly or absent

<400> 3

Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser Ser His  
1 5 10 15

Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Met  
20 25 30

Phe Lys Thr Glu Gly Pro Asp Ser Asp Xaa Asp Ser Asp Pro Gly Glu  
35 40 45

Thr Lys Phe Met Leu Lys Lys His Arg Ser Thr Ser Gln Gly Lys Lys  
50 55 60

Ser Lys Leu His Ser Ser His Ala Arg Ser Gly Gly Pro Glu Lys Gly  
65 70 75 80

Ala Gln Ala

<210> 4  
<211> 83  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Palindromic polypeptide based on human p53

<220>  
<221> MISC\_FEATURE  
<222> (42)..(42)  
<223> Xaa = Gly or absent

<400> 4

Asp Ser Asp Pro Gly Glu Thr Lys Phe Met Leu Lys Lys His Arg Ser  
1 5 10 15

Thr Ser Gln Gly Lys Lys Ser Lys Leu His Ser Ser His Ala Arg Ser  
20 25 30

Gly Gly Pro Glu Lys Gly Ala Gln Ala Xaa Ala Gln Ala Gly Lys Glu  
35 40 45

Pro Gly Gly Ser Arg Ala His Ser Ser His Leu Lys Ser Lys Lys Gly  
50 55 60

Gln Ser Thr Ser Arg His Lys Lys Leu Met Phe Lys Thr Glu Gly Pro  
2/6

65

70

75

80

Asp Ser Asp

<210> 5  
 <211> 167  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Palindromic polypeptide based on human p53

<220>  
 <221> MISC\_FEATURE  
 <222> (42)..(42)  
 <223> Xaa = Gly or absent

<220>  
 <221> MISC\_FEATURE  
 <222> (84)..(84)  
 <223> Xaa = Gly or absent

<220>  
 <221> MISC\_FEATURE  
 <222> (126)..(126)  
 <223> Xaa = Gly or absent

<400> 5

Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser Ser His  
 1 5 10 15

Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Met  
 20 25 30

Phe Lys Thr Glu Gly Pro Asp Ser Asp Xaa Asp Ser Asp Pro Gly Glu  
 35 40 45

Thr Lys Phe Met Leu Lys Lys His Arg Ser Thr Ser Gln Gly Lys Lys  
 50 55 60

Ser Lys Leu His Ser Ser His Ala Arg Ser Gly Gly Pro Glu Lys Gly  
 65 70 75 80

Ala Gln Ala Xaa Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala  
 85 90 95

His Ser Ser His Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His  
 100 105 110

Lys Lys Leu Met Phe Lys Thr Glu Gly Pro Asp Ser Asp Xaa Asp Ser  
 115 120 125

Asp Pro Gly Glu Thr Lys Phe Met Leu Lys Lys His Arg Ser Thr Ser  
 130 135 140

Gln Gly Lys Lys Ser Lys Leu His Ser Ser His Ala Arg Ser Gly Gly  
 145 150 155 160

Pro Glu Lys Gly Ala Gln Ala  
 165

<210> 6  
 <211> 167  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Palindromic polypeptide based on human p53

<220>  
 <221> MISC\_FEATURE  
 <222> (42)..(42)  
 <223> Xaa = Gly or absent

<220>  
 <221> MISC\_FEATURE  
 <222> (84)..(84)  
 <223> Xaa = Gly or absent

<220>  
 <221> MISC\_FEATURE  
 <222> (126)..(126)  
 <223> Xaa = Gly or absent

<400> 6

Asp Ser Asp Pro Gly Glu Thr Lys Phe Met Leu Lys Lys His Arg Ser  
 1 5 10 15

Thr Ser Gln Gly Lys Lys Ser Lys Leu His Ser Ser His Ala Arg Ser  
 20 25 30

Gly Gly Pro Glu Lys Gly Ala Gln Ala Xaa Ala Gln Ala Gly Lys Glu  
 35 40 45

Pro Gly Gly Ser Arg Ala His Ser Ser His Leu Lys Ser Lys Lys Gly  
 50 55 60

Gln Ser Thr Ser Arg His Lys Lys Leu Met Phe Lys Thr Glu Gly Pro  
 65 70 75 80

Asp Ser Asp Xaa Asp Ser Asp Pro Gly Glu Thr Lys Phe Met Leu Lys  
 85 90 95

Lys His Arg Ser Thr Ser Gln Gly Lys Lys Ser Lys Leu His Ser Ser  
 100 105 110

His Ala Arg Ser Gly Gly Pro Glu Lys Gly Ala Gln Ala Xaa Ala Gln  
 115 120 125

Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser Ser His Leu Lys  
 130 135 140

Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Met Phe Lys  
 145 150 155 160

Thr Glu Gly Pro Asp Ser Asp  
 165

<210> 7  
 <211> 164  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> palindromic polypeptide based on human p53

<400> 7

Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser Ser His  
 1 5 10 15

Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Met  
 20 25 30

Phe Lys Thr Glu Gly Pro Asp Ser Asp Asp Ser Asp Pro Gly Glu Thr  
 35 40 45

Lys Phe Met Leu Lys Lys His Arg Ser Thr Ser Gln Gly Lys Lys Ser  
 50 55 60

Lys Leu His Ser Ser His Ala Arg Ser Gly Gly Pro Glu Lys Gly Ala  
 65 70 75 80

Gln Ala Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser  
 85 90 95

Ser His Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys  
 100 105 110

Leu Met Phe Lys Thr Glu Gly Pro Asp Ser Asp Asp Ser Asp Pro Gly  
 115 120 125

Glu Thr Lys Phe Met Leu Lys Lys His Arg Ser Thr Ser Gln Gly Lys  
 130 135 140

Lys Ser Lys Leu His Ser Ser His Ala Arg Ser Gly Gly Pro Glu Lys  
 145 150 155 160

Gly Ala Gln Ala

<210> 8  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Membrane carrier peptide derived from Antennaepedia

<400> 8

Lys Lys Trp Lys Met Arg Arg Asn Gln Phe Trp Val Lys Val Gln Arg  
1 5 10 15

Gly

<210> 9

<211> 6

<212> DNA

<213> Artificial Sequence

<220>

<223> Restriction enzyme site derived from human p53

<400> 9

ggccgg

6